

The Builder.

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NOW best to construct a THEATRE where the largest number of persons may sit most at their ease, be most secure, and see and hear most perfectly, is still a question, and probably will long remain so. The form, arrangement, best materials in respect of the transmission of sound, and mode of obtaining security from fire and completeness of the approaches, must be investigated by every architect for himself, when about to design a theatre for dramatic representations, as points unsettled. More than one of the latest erected theatres in London, so far from being superior to those which preceded them, and giving evidence of greater knowledge of the subject, are positive retrogressions. In many of the seats, seeing and hearing are quite out of the question; the ventilation is abominable, draughts universal; and if the occurrence of fire, or any other cause of alarm, should lead to a hasty attempt, on the part of the audience, to escape from the house, the consequences could not fail to be dreadful.

We may have occasion to speak more fully on this subject before long: the inquiry suggested is full of interest to a large class of persons; and, moreover, would apply to many other structures besides theatres. As regards the arrangement of apartments with reference to the laws of sound, all are avowedly ignorant, and are unable to obtain with certainty any desired result. Some notes under this head will be found on another page in the present number of our journal, and may be referred to in connection with this remark.

At the present moment too, when a new theatre is about to be erected in London, and one of the "royal" houses is undergoing alterations little short, in extent, of an entire reconstruction, this subject would seem to have more than ordinary claims to notice.

This consideration, with others, leads us to place before our readers the plan of the "Théâtre Montpensier,"* just now completed in Paris, and a view of the entrance front on the *Boulevard du Temple*, together with some particulars, for which we are chiefly indebted to an ably-conducted French journal, known as *L'Illustration*.

Most of our readers are aware that the privilege of erecting this theatre was obtained by M. Alexandre Dumas, through the Duke de Montpensier, a staunch friend of that distinguished and most prolific writer. A company was formed to build the theatre, and by them the ancient *Hotel Foulon*, and land whereon it stood, were purchased for 24,000*l.* sterling. For a long time expectation has been on tip-toe in Paris concerning the new theatre, and the most marvellous stories have been circulated concerning the arrangements, fittings, and decorations; almost sufficient, indeed, to ensure disappointment when opened. Whether or not, however, this has been the case, we have yet to learn.

An examination of the plan† shows, that the site was an awkward one, and called for the exercise of skill in adapting it to the required

purpose. This and another circumstance trammelled the architects considerably, and materially influenced the arrangement of the theatre. The circumstance alluded to was the necessity of providing for the accommodation of two widely differing audiences, and this is dwelt on by the French journalists as a matter of greater difficulty than it seems to be to us. The audience of the theatres of the boulevard ("that dramatic Acropolis so picturesquely termed the Boulevard of Crime") is of a peculiar, well-known, and fixed character, while the directors of the new theatre (the popular theatre, too, *par excellence*), looked to the most brilliant society of Paris as its patrons, in consequence of the peculiar circumstances under which it was erected. What was desired, therefore, was a building so arranged, that the *élite* of Parisian society might find in it every provision for their comfort without in any way trenching upon that of the ordinary public of the theatres of the boulevard. To obtain this, the directors associated with M. de Dreux, who had obtained the chief prize for architecture in the Academy of Beaux-Arts, and had been sent to Rome by that body,—M. Séchan, an eminent painter of architectural scenery; and committed into their hands the entire direction of the works.

Provision for the inferior audience mentioned appears to have been made by two large amphitheatres, or, as we should term them, galleries, extending behind the second and third tiers of boxes; one of these is shewn on the plan, and is marked D.

The form of the house is that of an ellipse, and differs from most modern theatres in having the transverse axis, like Palladio's theatre at Vicenza, parallel with the scene, that is so far as relates to the principal part of the audience. The longest diameter, from the back of the boxes to the back of the boxes, is about 65 feet; the shorter, to the front of the stage, is 52 feet. The opening of the stage is about 36 feet.

It is laid down by B. Wyatt, in "Observations on the Principles of a Design for a Theatre," that as the reach of the human voice, when moderately exerted, is about two-thirds further in a direct front line than laterally, and the voice being distinctly audible on each side of the speaker at a distance of 75 feet, it will be as plainly heard at a distance of 92 feet in front of him, therefore, "that the geometrical figure which comes nearest to the extreme limits of this natural expansion of the voice is a semicircle of 75 feet radius, or 150 feet in diameter, continued on each side to the extent of 17 feet, or in the proportion of about two-ninths of its lateral expansion beyond the limits of the semicircle, and then converging suddenly until the two lines meet behind the back of the speaker." There are many reasons, however, why a theatre of this extent should not be erected.

"Taking 75 feet (says Mr. Gwilt, commenting on this passage) for the distance at which the voice can be heard laterally, as the space between the front line of the stage and its immediately opposite boxes may occasionally be in the lateral direction of the voice, the greatest distance from the front wall of the stage to the back wall of the boxes opposite the stage should not exceed 75 feet, the limit of the voice in its lateral direction, because of the turns of the head which the actor must often make for the business of the scene, when that which was opposite might become lateral; and thus those persons sitting in the opposite boxes would be 92—75=17 feet beyond the reach of the voice.

The use of a semicircle, without a modification would, however, involve the extension of the stage opening to an inconvenient width;

and Mr. Wyatt very properly considers that the whole area of a theatre should contain little more than one-third of the space over which the voice can reach; "the one," he says, "being (independently of the space behind the back of the speaker) a superficies of 11,365 feet, and the other of 4,003." This, he thinks, will compensate for the absorption of sound consequent on the number of the audience, the woollen garments they wear, and the state of the atmosphere, and would insure a good hearing in every part of the house.

According to the author's statement, he recommends that the distance from the front of the stage to the back wall immediately opposite should be about 54 feet; in the old Drury-lane it was 74 feet, and in the old Covent-garden, built about 1730, it was 54 feet 6 inches. In the Opera House, built by Vanbrugh, it was 66 feet. At Milan it is 78 feet. At the old San Carlos, at Naples, 73 feet; and at Bologna, 74 feet.*

This, however, given for the reader's consideration, is leaving the Théâtre Montpensier, where it will be observed a large proportion of the audience are brought very close to the stage. The arrangement here adopted has the effect of reducing in appearance the size of the house; but those who have been into it assert there is no place in it, whether it be in front or at the sides, in the boxes or the amphitheatre, where the whole scene is not distinctly visible.

The front of the boxes is white, with continued garlands of fruit, flowers, and foliage, painted on it. The front of what we should call the dress-circle is a balustrade. The proscenium and curtain are very elegant.

The number of persons the house is said to contain is 2,000. We may mention, that instead of one central chandelier, which would have interfered with the view from the galleries, constructed as they are, there are two, one on each side, by which means inconvenience is avoided.

The frontage on the Boulevard is very small,—not more than 26 feet, and gave little opportunity for display. The arrangement of this front, as shewn by our engraving,† is not unlike that of the Adelphi Theatre, although the details are widely different. The caryatides on the ground story represent Tragedy and Comedy; the upper groups, supported on brackets represent, on the right hand, Hamlet and Ophelia, and on the other side the Cid and *Chimène*. The central figure, for the admission of which the circular pediment is inexcusably broken, represents the genius of modern art. The whole of the sculpture is the work of M. Klagmann, and is said to be well executed.

The total cost of the building and fittings is stated at 32,000*l.*

STOPPAGE OF THE WORKS IN WELLS CATHEDRAL.

WE much regret to find that the restoration of Wells Cathedral, to which we alluded some time ago, has been brought prematurely to a close. The alleged excuse for suspension, with the dean, is this, "When I have all the money requisite to carry out the projected works, then we may proceed." To this doctrine all who *really* feel a desire for the restorations object, and truly say, let us spend all we have WELL, and let the blame rest with the county gentlemen and public, if by their failing in subscriptions we cannot go further.

The nave is thoroughly cleansed and restored, and the ancient painting on the groining renewed: the beautiful vaulting of the choir is still choked by whitewash. The intention was to take on the scaffolding to the choir, and by gilding the bosses and cleansing the choir, &c., at least to secure a harmonious effect from east to west. For this there was abundant money; but the new dean, giving

* Encyclopædia of Architecture, p. 664.

† See p. 87.

* We use the name by which it has been known up to this time. What it will, after all, be called, we cannot say with certainty at this moment.

† See p. 87.